

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

2960 Foster Creighton Drive

Nashville, TN 37204

Tel: (615)726-0177

TestAmerica Job ID: 490-58930-1

Client Project/Site: Everett Terminal - Outfall 01C

For:

Exxon Global Remed. Grp

52 Beacham Street

Everett, Massachusetts 02149

Attn: Damian Guzman

*Cathy Gartner*

Authorized for release by:

8/22/2014 9:41:06 AM

Cathy Gartner, Project Manager I

(615)301-5041

[cathy.gartner@testamericainc.com](mailto:cathy.gartner@testamericainc.com)

Designee for

Gail Lage, Senior Project Manager

(615)301-5741

[gail.lage@testamericainc.com](mailto:gail.lage@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Sample Summary . . . . .	3
Case Narrative . . . . .	4
Definitions . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	9
QC Association . . . . .	13
Chronicle . . . . .	14
Method Summary . . . . .	15
Certification Summary . . . . .	16
Chain of Custody . . . . .	17
Receipt Checklists . . . . .	19

## Sample Summary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-58930-1	Outfall 01 C	Wastewater	08/07/14 12:20	08/08/14 08:15
490-58930-2	Outfall 01 C-TSS - 1	Wastewater	08/07/14 12:20	08/08/14 08:15
490-58930-5	Trip Blank	Water	08/07/14 00:01	08/08/14 08:15

## Case Narrative

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

**Job ID: 490-58930-1**

**Laboratory: TestAmerica Nashville**

### Narrative

#### Job Narrative 490-58930-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/8/2014 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.6° C.

#### HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC VOA

Method(s) 602: 2/2 samples submitted for volatile organic compounds (VOCs) analysis contained headspace: Trip Blank (490-58930-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

Method(s) 610: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 183091.

Method(s) 610: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 184550.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Definitions/Glossary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

## Client Sample ID: Outfall 01 C

Date Collected: 08/07/14 12:20

Date Received: 08/08/14 08:15

## Lab Sample ID: 490-58930-1

Matrix: Wastewater

### Method: 602 - Purgeable Aromatics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			08/08/14 19:08	1
Toluene	<0.330		1.00	0.330	ug/L			08/08/14 19:08	1
Ethylbenzene	<0.370		1.00	0.370	ug/L			08/08/14 19:08	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			08/08/14 19:08	1
Methyl tert-butyl ether	3.18		1.00	0.460	ug/L			08/08/14 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		50 - 150		08/08/14 19:08	1

### Method: 610 - PAHs (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.165		0.971	0.165	ug/L		08/12/14 10:28	08/20/14 21:36	1
Acenaphthylene	<0.223		0.971	0.223	ug/L		08/12/14 10:28	08/20/14 21:36	1
Anthracene	<0.0971		0.971	0.0971	ug/L		08/12/14 10:28	08/20/14 21:36	1
Benzo[a]anthracene	<0.0194		0.194	0.0194	ug/L		08/12/14 10:28	08/20/14 21:36	1
Benzo[a]pyrene	<0.0194		0.0971	0.0194	ug/L		08/12/14 10:28	08/20/14 21:36	1
Benzo[b]fluoranthene	<0.0194		0.0971	0.0194	ug/L		08/12/14 10:28	08/20/14 21:36	1
Benzo[g,h,i]perylene	<0.0194		0.194	0.0194	ug/L		08/12/14 10:28	08/20/14 21:36	1
Benzo[k]fluoranthene	<0.0194		0.136	0.0194	ug/L		08/12/14 10:28	08/20/14 21:36	1
Chrysene	<0.0194		0.0971	0.0194	ug/L		08/12/14 10:28	08/20/14 21:36	1
Dibenz(a,h)anthracene	<0.0291		0.194	0.0291	ug/L		08/12/14 10:28	08/20/14 21:36	1
Fluoranthene	<0.0291		0.194	0.0291	ug/L		08/12/14 10:28	08/20/14 21:36	1
Fluorene	<0.0388		0.485	0.0388	ug/L		08/12/14 10:28	08/20/14 21:36	1
Indeno[1,2,3-cd]pyrene	<0.0388		0.194	0.0388	ug/L		08/12/14 10:28	08/20/14 21:36	1
Naphthalene	<0.330		0.971	0.330	ug/L		08/12/14 10:28	08/20/14 21:36	1
Phenanthrene	<0.0485		0.485	0.0485	ug/L		08/12/14 10:28	08/20/14 21:36	1
Pyrene	<0.0291		0.194	0.0291	ug/L		08/12/14 10:28	08/20/14 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	86		25 - 135	08/12/14 10:28	08/20/14 21:36	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	<1.56		4.47	1.56	mg/L		08/21/14 13:40	08/21/14 13:40	1

TestAmerica Nashville

## Client Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

**Client Sample ID: Outfall 01 C-TSS - 1**

**Lab Sample ID: 490-58930-2**

**Date Collected: 08/07/14 12:20**

**Matrix: Wastewater**

**Date Received: 08/08/14 08:15**

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1.26		1.05	0.737	mg/L			08/12/14 07:15	1

# Client Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

**Client Sample ID: Trip Blank**

**Date Collected: 08/07/14 00:01**

**Date Received: 08/08/14 08:15**

**Lab Sample ID: 490-58930-5**

**Matrix: Water**

## Method: 602 - Purgeable Aromatics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			08/08/14 18:38	1
Toluene	<0.330		1.00	0.330	ug/L			08/08/14 18:38	1
Ethylbenzene	<0.370		1.00	0.370	ug/L			08/08/14 18:38	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			08/08/14 18:38	1
Methyl tert-butyl ether	<0.460		1.00	0.460	ug/L			08/08/14 18:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		50 - 150					08/08/14 18:38	1



# QC Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

## Method: 602 - Purgeable Aromatics (GC)

Lab Sample ID: MB 490-182332/17

Matrix: Water

Analysis Batch: 182332

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			08/08/14 18:09	1
Toluene	<0.330		1.00	0.330	ug/L			08/08/14 18:09	1
Ethylbenzene	<0.370		1.00	0.370	ug/L			08/08/14 18:09	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			08/08/14 18:09	1
Methyl tert-butyl ether	<0.460		1.00	0.460	ug/L			08/08/14 18:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		50 - 150		08/08/14 18:09	1

Lab Sample ID: MB 490-182332/4

Matrix: Water

Analysis Batch: 182332

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			08/08/14 10:53	1
Toluene	<0.330		1.00	0.330	ug/L			08/08/14 10:53	1
Ethylbenzene	<0.370		1.00	0.370	ug/L			08/08/14 10:53	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			08/08/14 10:53	1
Methyl tert-butyl ether	<0.460		1.00	0.460	ug/L			08/08/14 10:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		50 - 150		08/08/14 10:53	1

Lab Sample ID: LCS 490-182332/3

Matrix: Water

Analysis Batch: 182332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	22.00		ug/L		110	39 - 150
Toluene	20.0	21.79		ug/L		109	46 - 148
Ethylbenzene	20.0	21.91		ug/L		110	32 - 160
Xylenes, Total	60.0	62.23		ug/L		104	66 - 136
Methyl tert-butyl ether	20.0	20.13		ug/L		101	56 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	110		50 - 150

Lab Sample ID: 490-58930-1 MS

Matrix: Wastewater

Analysis Batch: 182332

Client Sample ID: Outfall 01 C

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.360		20.0	22.83		ug/L		114	39 - 150
Toluene	<0.330		20.0	22.35		ug/L		112	46 - 148
Ethylbenzene	<0.370		20.0	22.06		ug/L		110	32 - 160
Xylenes, Total	<0.600		60.0	62.82		ug/L		105	66 - 136
Methyl tert-butyl ether	3.18		20.0	24.53		ug/L		107	56 - 136

TestAmerica Nashville

# QC Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

## Method: 602 - Purgeable Aromatics (GC) (Continued)

Lab Sample ID: 490-58930-1 MS

Matrix: Wastewater

Analysis Batch: 182332

Client Sample ID: Outfall 01 C

Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	112		50 - 150

## Method: 610 - PAHs (HPLC)

Lab Sample ID: MB 490-183091/1-A

Matrix: Water

Analysis Batch: 184897

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 183091

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.170		1.00	0.170	ug/L		08/12/14 10:28	08/19/14 12:03	1
Acenaphthene	<0.170		1.00	0.170	ug/L		08/12/14 10:28	08/19/14 12:03	1
Acenaphthylene	<0.230		1.00	0.230	ug/L		08/12/14 10:28	08/19/14 12:03	1
Acenaphthylene	<0.230		1.00	0.230	ug/L		08/12/14 10:28	08/19/14 12:03	1
Anthracene	<0.100		1.00	0.100	ug/L		08/12/14 10:28	08/19/14 12:03	1
Benzo[a]anthracene	<0.0200		0.200	0.0200	ug/L		08/12/14 10:28	08/19/14 12:03	1
Benzo[a]pyrene	<0.0200		0.100	0.0200	ug/L		08/12/14 10:28	08/19/14 12:03	1
Benzo[b]fluoranthene	<0.0200		0.100	0.0200	ug/L		08/12/14 10:28	08/19/14 12:03	1
Benzo[g,h,i]perylene	<0.0200		0.200	0.0200	ug/L		08/12/14 10:28	08/19/14 12:03	1
Benzo[k]fluoranthene	<0.0200		0.140	0.0200	ug/L		08/12/14 10:28	08/19/14 12:03	1
Chrysene	<0.0200		0.100	0.0200	ug/L		08/12/14 10:28	08/19/14 12:03	1
Dibenz(a,h)anthracene	<0.0300		0.200	0.0300	ug/L		08/12/14 10:28	08/19/14 12:03	1
Fluoranthene	<0.0300		0.200	0.0300	ug/L		08/12/14 10:28	08/19/14 12:03	1
Fluorene	<0.0400		0.500	0.0400	ug/L		08/12/14 10:28	08/19/14 12:03	1
Fluorene	<0.0400		0.500	0.0400	ug/L		08/12/14 10:28	08/19/14 12:03	1
Indeno[1,2,3-cd]pyrene	<0.0400		0.200	0.0400	ug/L		08/12/14 10:28	08/19/14 12:03	1
Naphthalene	<0.340		1.00	0.340	ug/L		08/12/14 10:28	08/19/14 12:03	1
Naphthalene	<0.340		1.00	0.340	ug/L		08/12/14 10:28	08/19/14 12:03	1
Phenanthrene	<0.0500		0.500	0.0500	ug/L		08/12/14 10:28	08/19/14 12:03	1
Pyrene	<0.0300		0.200	0.0300	ug/L		08/12/14 10:28	08/19/14 12:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	94		25 - 135	08/12/14 10:28	08/19/14 12:03	1
p-Terphenyl	83		25 - 135	08/12/14 10:28	08/19/14 12:03	1

Lab Sample ID: LCS 490-183091/2-A

Matrix: Water

Analysis Batch: 184897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 183091

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	2.00	1.194		ug/L		60	1 - 124
Acenaphthene	2.00	1.114		ug/L		56	1 - 124
Acenaphthylene	4.00	2.058		ug/L		51	1 - 139
Acenaphthylene	4.00	2.317		ug/L		58	1 - 139
Anthracene	2.00	1.235		ug/L		62	1 - 126
Benzo[a]anthracene	2.00	1.404		ug/L		70	12 - 135
Benzo[a]pyrene	2.00	1.178		ug/L		59	1 - 128
Benzo[b]fluoranthene	2.00	1.407		ug/L		70	6 - 150

TestAmerica Nashville

# QC Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

## Method: 610 - PAHs (HPLC) (Continued)

Lab Sample ID: LCS 490-183091/2-A

Matrix: Water

Analysis Batch: 184897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 183091

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[g,h,i]perylene	2.00	1.306		ug/L		65	1 - 116
Benzo[k]fluoranthene	2.00	1.450		ug/L		73	1 - 159
Chrysene	2.00	1.354		ug/L		68	1 - 199
Dibenz(a,h)anthracene	2.00	1.214		ug/L		61	1 - 110
Fluoranthene	2.00	1.328		ug/L		66	14 - 123
Fluorene	2.00	1.012		ug/L		51	1 - 142
Fluorene	2.00	1.098		ug/L		55	1 - 142
Indeno[1,2,3-cd]pyrene	2.00	1.359		ug/L		68	1 - 116
Naphthalene	2.00	1.168		ug/L		58	1 - 122
Naphthalene	2.00	1.146		ug/L		57	1 - 122
Phenanthrene	2.00	1.153		ug/L		58	1 - 155
Pyrene	2.00	1.284		ug/L		64	1 - 140

Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl	61		25 - 135
p-Terphenyl	65		25 - 135

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 490-185461/1-A

Matrix: Water

Analysis Batch: 185464

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 185461

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	<1.40		4.00	1.40	mg/L		08/21/14 13:40	08/21/14 13:40	1

Lab Sample ID: LCS 490-185461/2-A

Matrix: Water

Analysis Batch: 185464

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 185461

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	41.7	37.08		mg/L		89	78 - 114

Lab Sample ID: LCSD 490-185461/3-A

Matrix: Water

Analysis Batch: 185464

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 185461

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Oil & Grease (HEM)	41.7	38.54		mg/L		92	78 - 114	4	18

Lab Sample ID: 490-58930-1 MS

Matrix: Wastewater

Analysis Batch: 185464

Client Sample ID: Outfall 01 C

Prep Type: Total/NA

Prep Batch: 185461

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	<1.56		46.5	40.58		mg/L		87	78 - 114

TestAmerica Nashville

# QC Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 490-183019/1

Matrix: Water

Analysis Batch: 183019

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<0.700		1.00	0.700	mg/L	-		08/12/14 07:15	1

Lab Sample ID: LCS 490-183019/2

Matrix: Water

Analysis Batch: 183019

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	102.6		mg/L	-	103	90 - 110

Lab Sample ID: 490-58957-A-1 DU

Matrix: Water

Analysis Batch: 183019

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	17100		17900		mg/L	-	5	20

# QC Association Summary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

## GC VOA

### Analysis Batch: 182332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-58930-1	Outfall 01 C	Total/NA	Wastewater	602	
490-58930-1 MS	Outfall 01 C	Total/NA	Wastewater	602	
490-58930-5	Trip Blank	Total/NA	Water	602	
LCS 490-182332/3	Lab Control Sample	Total/NA	Water	602	
MB 490-182332/17	Method Blank	Total/NA	Water	602	
MB 490-182332/4	Method Blank	Total/NA	Water	602	

## HPLC/IC

### Prep Batch: 183091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-58930-1	Outfall 01 C	Total/NA	Wastewater	610	
LCS 490-183091/2-A	Lab Control Sample	Total/NA	Water	610	
MB 490-183091/1-A	Method Blank	Total/NA	Water	610	

### Analysis Batch: 184897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-183091/2-A	Lab Control Sample	Total/NA	Water	610	183091
MB 490-183091/1-A	Method Blank	Total/NA	Water	610	183091

### Analysis Batch: 185318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-58930-1	Outfall 01 C	Total/NA	Wastewater	610	183091

## General Chemistry

### Analysis Batch: 183019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-58930-2	Outfall 01 C-TSS - 1	Total/NA	Wastewater	SM 2540D	
490-58957-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	
LCS 490-183019/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 490-183019/1	Method Blank	Total/NA	Water	SM 2540D	

### Prep Batch: 185461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-58930-1	Outfall 01 C	Total/NA	Wastewater	1664A	
490-58930-1 MS	Outfall 01 C	Total/NA	Wastewater	1664A	
LCS 490-185461/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 490-185461/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 490-185461/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 185464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-58930-1	Outfall 01 C	Total/NA	Wastewater	1664A	185461
490-58930-1 MS	Outfall 01 C	Total/NA	Wastewater	1664A	185461
LCS 490-185461/2-A	Lab Control Sample	Total/NA	Water	1664A	185461
LCSD 490-185461/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	185461
MB 490-185461/1-A	Method Blank	Total/NA	Water	1664A	185461

TestAmerica Nashville

## Lab Chronicle

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

### Client Sample ID: Outfall 01 C

Date Collected: 08/07/14 12:20

Date Received: 08/08/14 08:15

### Lab Sample ID: 490-58930-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	602		1	5 mL	5 mL	182332	08/08/14 19:08	KML	TAL NSH
Total/NA	Prep	610			1030 mL	1 mL	183091	08/12/14 10:28	ET	TAL NSH
Total/NA	Analysis	610		1	1030 mL	1 mL	185318	08/20/14 21:36	HMT	TAL NSH
Total/NA	Analysis	1664A		1	860 mL	960 mL	185464	08/21/14 13:40	BAD	TAL NSH
Total/NA	Prep	1664A			860 mL	960 mL	185461	08/21/14 13:40	BAD	TAL NSH

### Client Sample ID: Outfall 01 C-TSS - 1

Date Collected: 08/07/14 12:20

Date Received: 08/08/14 08:15

### Lab Sample ID: 490-58930-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	950 mL	1000 mL	183019	08/12/14 07:15	CRM	TAL NSH

### Client Sample ID: Trip Blank

Date Collected: 08/07/14 00:01

Date Received: 08/08/14 08:15

### Lab Sample ID: 490-58930-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	602		1	5 mL	5 mL	182332	08/08/14 18:38	KML	TAL NSH

#### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

## Method Summary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

Method	Method Description	Protocol	Laboratory
602	Purgeable Aromatics (GC)	40CFR136A	TAL NSH
610	PAHs (HPLC)	40CFR136A	TAL NSH
1664A	HEM and SGT-HEM	1664A	TAL NSH
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL NSH

### Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

## Certification Summary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01C

TestAmerica Job ID: 490-58930-1

### Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-15
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	10-31-14
Arizona	State Program	9	AZ0473	05-05-15
Arkansas DEQ	State Program	6	88-0737	04-25-15
California	NELAP	9	1168CA	10-31-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-15
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	04-01-16
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-15
Louisiana	NELAP	6	30613	06-30-15
Maryland	State Program	3	316	03-31-15
Massachusetts	State Program	1	M-TN032	06-30-15
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-15
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-15
New Hampshire	NELAP	1	2963	10-09-14
New Jersey	NELAP	2	TN965	06-30-15
New York	NELAP	2	11342	03-31-15
North Carolina (WW/SW)	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14 *
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14 *
Oregon	NELAP	10	TN200001	04-29-15
Pennsylvania	NELAP	3	68-00585	06-30-15
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-15
South Carolina (DW)	State Program	4	84009 (002)	02-23-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-15
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-15
Virginia	NELAP	3	460152	06-14-15
Washington	State Program	10	C789	07-19-15
West Virginia DEP	State Program	3	219	02-28-15
Wisconsin	State Program	5	998020430	08-31-15
Wyoming (UST)	A2LA	8	453.07	12-31-15

\* Certification renewal pending - certification considered valid.

TestAmerica Nashville



## COOLER RECEIPT FORM



490-58930 Chain of Custody

Cooler Received/Opened On : 8/8/2014 @ 0815

1. Tracking # 9707 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 96210146

2. Temperature of rep. sample or temp blank when opened: 0.6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) mm

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES..NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES NO..NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence # mm

I certify that I unloaded the cooler and answered questions 7-14 (initial) mm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES...NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) mm

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) mm

I certify that I attached a label with the unique LIMS number to each container (initial) mm

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO..#

58930

## Login Sample Receipt Checklist

Client: Exxon Global Remed. Grp

Job Number: 490-58930-1

**Login Number: 58930**

**List Source: TestAmerica Nashville**

**List Number: 1**

**Creator: McBride, Mike**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	